

A. In the Specification:

Please substitute the following paragraph for the paragraph on page 3 beginning at line 6:

5 Efforts today have centered on improving the
survival rates of stored oocytes by improving
cryopreservation techniques. According to Martino
10 *et al.* (Martino *et al.*, *Biol. Reprod.* 54: 1059 -
1069 (1996)), such efforts have focused on
comparing different cryoprotectants (Otoi *et al.*,
15 *Theriogenology* 40: 801-807 (1993); Dinnyes *et al.*,
Cryobiology 31: 569 - 570 (1994)) and different
freezing regimens (Lira *et al.*, *Theriogenology* 35:
1225 - 1235 (1991)); or related vitrification
methods (Otoi *et al.*, *Theriogenology* 40: 801 - 807
(1993); Otoi *et al.*, *Cryobiology* 37: 77 - 85
(1998)).

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Please substitute the following paragraph for the paragraph on page 12 beginning at line 17:

20 Oocytes or embryos are suspended in an
equilibration medium consisting of 4% (v/v)
ethylene glycol or other intracellular
cryoprotective agent in moderate concentration, in
25 a base medium (TCM 199 or similar solutions)
supplemented with 20% fetal bovine serum, or bovine
serum albumin, or any other macromolecules with
surfactant effects at room temperature, or higher,
physiological temperatures (39°C for example) for
30 several minutes. Following this equilibration

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CONT 5

period, groups of oocytes or embryos are rinsed at least two times in small drops of vitrification solution consisting of 35% ethylene glycol (or other intracellular cryoprotectants in high concentration), 5% polyvinyl- pyrrolidone (or other macromolecules), 0.4 M trehalose (or other sugars) in base medium and 20% fetal bovine serum, or other surfactant compounds, as described above, for a few seconds and dropped on the surface of a steel cube, or other solid surface with good heat conductivity, which is cooled down to around -150°C to -180°C or similar subzero temperatures by partially immersing it into liquid or solid nitrogen or into other cooling agents. It is preferred that the drop size be about 4 µl or smaller, more preferably 3 µl or smaller, and yet more preferably 2 µl or smaller, and yet more preferably 1 µl or smaller, which allows instantaneous vitrification. The vitrified droplets can be moved with a nitrogen-cooled forceps or other tool into 1-ml cryovials or other suitable containers.

B. In the Claims:

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Please cancel claims 5-8 without prejudice.

Please substitute amended claim 1, below, for claim 1 as filed.

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1. (AMENDED) ~~B~~ A method for the vitrification of biological materials, said method comprising the steps of: